

**Health Priority: High Risk Sexual Behavior**  
**Objective 3: Sexually Transmitted Infection, including HIV Infection**

**Long-term (2010) Outcome Objective:** Promote responsible sexual behavior throughout the life span, strengthen community capacity, and increase access to quality services to prevent sexually transmitted infection, including HIV infection.

Inputs	Outputs		Outcomes		
	Activities	Participation/ Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
Community recognition	Media campaigns	General public	Increase community recognition of sexually transmitted infections, including HIV	Increase the percentage of adolescents that delay initiation of sexual intercourse	Reduce the incident of sexually transmitted infections, including HIV infection
Commitment	School-based health education	Opinion leaders			
Leadership	Community-based health education	Adolescents (in and out of school)	Increase community's knowledge of sexually transmitted diseases, including HIV	Increase percentage of community members who engage in safer sex practices	
Funding	Individual risk reduction counseling	Affected (at risk populations)	Increase perception of STD/HIV risk	Increase the skills of community members to negotiate safer sex with partners	
Training		Prisoners	Increase the availability of free and accessible condoms		
Materials	Correctional and institutional health education	Sex workers	Improve education of health care providers	Increase individuals' willingness to seek STI/HIV testing and treatment	
Health care resources	Community awareness campaigns	Persons with sexually transmitted infections, including HIV	Increase testing and treatment in primary care settings	Reduce stigma associated with STI/HIV	
Coalition building	Health care provider education	Primary care providers	Improve and expand partner counseling and referral services	Remove institutional barriers that inhibit innovative services, and increase the use of innovative health care methods	
Sound public policy	Partner counseling and referral capacity building	Public health nurses	Improve laboratory training and support		
Clear messages	Public health capacity building	Disease intervention specialists	Improve disease surveillance	Increase accessibility of testing, treatment, and other services, including improved testing technologies	
	Collaboration and coordination	Health educators	Increase knowledge of effected populations (epidemiology)		
	Public health surveillance, research, and evaluation	Risk reduction counselors	Increase funding/reimbursement for STI/HIV testing and treatment	Improve the availability and quality of accurate and timely STD/HIV evaluation data	
	Health care reimbursement discussion	Laboratory scientists			
		Public health scientists			
		Insurance/HMOs and other players	Increase availability of public and private testing and treatment		

## Health Priority: High Risk Sexual Behavior

### Objective 3: Sexually Transmitted Infection, including HIV Infection

#### Long-term (2008-2010) Outcome Objective:

Promote responsible sexual behavior throughout the life span, strengthen community capacity, and increase access to quality services to prevent sexually transmitted infection, including HIV infection.

Wisconsin Baseline	Wisconsin Sources and Year
43 cases of primary and secondary syphilis reported per 100,000 population	2001 Wisconsin STD surveillance data
308.6 cases of <i>Chlamydia trachomatis</i> per 100,000 population	2001 Wisconsin STD surveillance data
114 cases of <i>Neisseria gonorrhoeae</i> reported per 100,000 population	2001 Wisconsin STD surveillance data
8 cases of HIV infection reported per 100,000 population	2001 Wisconsin HIV surveillance data

Federal/National Baseline	Federal/National Sources and Year
0.2 cases of primary and secondary syphilis reported per 100,000 population	<i>Healthy People 2010</i> , November 2000, USDHHS
154.3 cases of <i>Chlamydia trachomatis</i> per 100,000 population	<i>Healthy People 2010</i> , November 2000, USDHHS
57 cases of <i>Neisseria gonorrhoeae</i> reported per 100,000 population	<i>Healthy People 2010</i> , November 2000, USDHHS
Less than 4 cases of HIV infection reported per 100,000 population	CDC HIV Prevention 2000-2005 Strategic Plan

Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
13 - HIV	Prevent HIV infection and its related illness and death.	13-1	Reduce AIDS among adolescents and adults.
		13-5	(Developmental) Reduce the number of cases among HIV infection among adolescents and adults.
		13-6	Increase the proportion of sexually active persons who use condoms.
		13-11	Increase the proportion of adults with TB who have been tested for HIV.
		13-12	(Developmental) Increase the proportion of adults in publicly funded HIV counseling and testing sites who are screened for common bacterial sexually transmitted diseases (STDs) and are immunized against hepatitis B virus.

Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
		13-13	Increase the proportion of HIV infected adolescents and adults who receive testing, treatment, and prophylaxis consistent with current Public Health Service treatment guidelines.
		13-4	Reduce deaths from HIV infection.
25 - Sexually Transmitted Diseases	Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases and their complications.	25-1	Reduce the proportion of adolescents and young adults with chlamydia trachomatis infections.
		25-2	Reduce gonorrhea.
		25-3	Eliminate sustained domestic transmission of primary and secondary syphilis.
		25-4	Reduce the proportion of adults with genital herpes infection.
		25-5	Reduce the proportion of persons with human papillomavirus infection.
		25-6	Reduce the proportion of females who have ever required treatment for pelvic inflammatory disease.
		25-11	Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active
		25-18	Increase the proportion of primary care providers who treat patients with sexually transmitted disease and who manage cases according to recognized standards.

Definitions	
Term	Definition
Sexually Transmitted Infections (STI)	Sexually transmitted infections caused by chlamydia, gonorrhea, syphilis, chancroid, trichomoniasis, and other organisms, including HIV.
Infertility	When a woman has not used contraception and has not become pregnant for 12 months or more.

Definitions	
Term	Definition
HIV (Human immunodeficiency virus)	A virus that infects and takes over certain cells of the immune system that are important in fighting disease.
AIDS (Acquired immunodeficiency syndrome)	The most severe phase of infection with the human immunodeficiency virus (HIV). Persons infected with HIV are said to have AIDS when they get certain opportunistic infections or when their CD4+ cell count drops below 200.
CD4+ Cell (Also known as T helper cell)	A type of T cell found in the blood that is involved in protecting the body against infections.
Opportunistic Infections	Infections that take advantage of the opportunity offered when a person's immune system has been weakened by HIV infection. At least 25 medical conditions, including bacterial, fungal, and viral infections and certain types of cancer, are associated with HIV infection.
Counseling, testing and referral (CTR) services	CTR services are public health prevention and intervention strategies that are directed at reducing the spread of HIV through risk identification, prevention counseling, STI and HIV testing, and referral to community services
Partner counseling and referral services (PCRS)	STI and HIV partner counseling and referral services (PCRS) are public health prevention and intervention strategies primarily directed at reducing the spread of STIs and HIV by assisting persons with STIs and HIV with the notification and referral of sexual and needle-sharing partners. Partners are then offered prevention counseling, STI and HIV testing, and referral to community services.

### Rationale:

As discussed in *The Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behavior*, sexuality encompasses more than sexual behavior. Sexual health is connected to both mental and physical health and is important throughout the life span, not just in reproductive years. It is a core component of personality and a fundamental part of human life.

While it is important to acknowledge the many positive aspects of sexuality, there are also undesirable consequences, namely sexually transmitted infections, which include HIV infection. Sexually transmitted infections encompass a complex array of infections, diseases and syndromes caused by more than 25 infectious agents that can be transmitted through sexual contact. Sexually transmitted infections are remarkably common. It is estimated that 12 million new cases of sexually transmitted infections occur in the United States each year. There are more sexually transmitted infections reported in the U.S. than all other communicable diseases combined.

The public health effects of sexually transmitted infections are great. In addition to acute illness, sexually transmitted infections are a significant cause of infertility, and a contributing factor to many cases of cervical cancer. Human immunodeficiency virus (HIV) infection, which is predominately a sexually transmitted infection, is among the leading causes of death for persons between the ages of 25 and 44. It is estimated that the annual direct and indirect cost associated with sexually transmitted infections in the U.S., excluding the cost of sexually transmitted HIV infection, is \$10 billion.

Despite the high incidence of sexually transmitted infections, and the resultant human and economic loss, sexually transmitted infections have historically been a hidden problem. There is a reluctance to address sexual health issues and a lack of recognition of the scope, impact, and consequences of sexually transmitted infections. Public awareness regarding sexually transmitted infections is not widespread, nor their disproportionate impact on women, adolescents, and racial and ethnic minorities. Sexually transmitted infections rates in the United States exceed those in all other countries of the industrialized world. Other countries have reduced significantly the burden of sexually transmitted infections on their citizens, an accomplishment the United States should also strive to emulate.

Sexually transmitted infections are very common in Wisconsin. In 1997, 19,089 cases of sexually transmitted infections were reported to the Wisconsin Division of Public Health<sup>1</sup>. The overall reported rate was 382 cases per 100,000 population. The most frequent sexually transmitted infections reported were chlamydia and gonorrhea, together representing 84% of all reported cases. In the U.S., it is believed that more than 90% of all sexually transmitted infections are not reported to public health authorities<sup>2</sup>.

In Wisconsin sexually transmitted infections predominately occur among teenagers and young adults. In 1997, one third (34%) of persons reported with sexually transmitted infections in Wisconsin were between 15 and 19 years of age, 30% were 20-24 years of age, and 15% were 25-29 years of age. The highest rate (1,859 per 100,000 population) was among teenagers 15-19 years of age.

In Wisconsin, sexually transmitted infections represent a major health disparity. The reported rate for African Americans (3,160 per 100,000 population) is more than 26-fold greater than the rate among whites (119 per 100,000 population). For African Americans, the peak rate (10,951 per 100,000 population) occurred in the 20-24 age group. This rate implies that in Wisconsin during 1997 there was one reported case of sexually transmitted infection for every nine African Americans in that age group. For a significant proportion of cases, however, race was unspecified; thus, the reported rates for each race group must be considered minimum values.

## **Outcomes:**

These are divided into two major categories, including community outcomes and infrastructure outcomes:

### Community Outcomes:

#### **Short-term Outcome Objectives (2002-2004)**

The public health system will:

- Increase community recognition of the importance of sexually transmitted infections, including HIV infection.
- Increase community members' knowledge of sexually transmitted infections, including "safer sex" practices and symptoms.
- Increase community members' awareness of their risk for sexually transmitted infections, including HIV infection.
- Increase the availability of free and accessible condoms in the community.

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<sup>1</sup> As of April 1, 2000, the following STDs are reportable in Wisconsin: syphilis, gonorrhea, Chlamydia trachomatis, primary genital Herpes simplex, chancroid, and sexually transmitted pelvic inflammatory disease.

<sup>2</sup> In the United States it is estimated that only about two-thirds of syphilis cases, one half of gonorrhea cases, and one sixth of chlamydia cases are reported to public health authorities. In addition, some very common STDs (i.e., human papilloma virus infection, and trichomonas) are not reportable diseases.

## **Medium-term Outcome Objectives (2005-2007)**

The public health system will:

- Increase the percentage of adolescents who delay the initiation of sexual intercourse.
- Increase the percentage of community members who engage in “safer sex” practices.
- Increase the percentage of community members who have the skills to negotiate “safer sex” with partners.
- Increase the willingness of community members to seek testing and treatment for sexually transmitted infections, including HIV infection.
- Reduce stigma associated with sexually transmitted infections, including HIV infection.

**Inputs:** (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- Recognition of the problem among legislative, state, community, education, public health, and health care policy leadership.
- Commitment of above groups to mobilizing resources to implement plan.
- Leadership from above groups in developing public policy.
- Funding for educational materials.

**Outputs:** (*What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.*)

- The Division of Public Health, in collaboration with community partners, will conduct media campaigns to increase community awareness of the problem.
- The Department of Public Instruction, in collaboration with the Division of Public Health and other community partners, will conduct school-based education.
- The Division of Public Health, in collaboration with community partners, will conduct community-based health education aimed at parents and populations at risk.
- The public health system, in collaboration with correctional health staff, will conduct health education in correctional and other institutional settings.
- The public health system, in collaboration with community partners, will provide individual risk reduction counseling in a variety of settings including health care facilities, schools, half-way houses and alcohol and other drug treatment facilities.
- The Division of Public Health and local public health departments will provide partner notification and risk reduction counseling services to all individuals diagnosed with HIV and/or sexually transmitted infections.
- The Division of Public Health, in partnership with community providers, will build coalitions of community leaders to raise awareness in specific groups.

## **Infrastructure Outcomes:**

### **Short-term Outcome Objectives (2002-2004)**

- The public health system will improve education of health care providers regarding sexually transmitted infections, including HIV infection.
- The public health system will increase testing and treatment services provided by primary health care providers.
- The public health system will increase funding for partner counseling and referral services for sexually transmitted infections, including HIV infection.
- The public health system will improve laboratory training and support for testing.

- The public health system will improve disease surveillance systems.
- The public health system will increase knowledge among public health providers of the populations affected by sexually transmitted infections, including HIV infection.
- The public health system will increase funding/reimbursement for testing and treatment.
- The public health system will continue seeking ways to remove institutional barriers that inhibit innovation.

### **Medium-term Outcome Objectives (2005-2007)**

- The public health system will increase the availability of public and private testing and treatment services.
- The public health system will increase accessibility (e.g., cost, location, hours, culture, language, etc.) of testing, treatment and other services.
- The public health system will increase use of innovative methods for treatment, care or public health follow up of sexually transmitted infections, including HIV infection.
- The Division of Public Health will increase the availability of improved albeit expensive treatments for sexually transmitted infections, including HIV infection.
- The Division of Public Health will increase access to improved testing technologies.
- The Division of Public Health will improve availability of accurate and timely data at state and local levels.
- The Division of Public Health will improve evaluation of services at state and local levels.

### **Inputs:** *(What we invest – staff, volunteers, time money, technology, equipment, etc.)*

- Recognition of the problem among legislative, state, community, education, public health and health care policy leadership.
- Commitment of above groups to providing resources to implement plan.
- Leadership from above groups in developing public policy.
- Funding for increased staffing, staff education, improved surveillance/data system and increased and improved testing procedures.

### **Outputs:** *(What we do – workshops, meetings, product development, training. Who we reach- community residents, agencies, organizations, elected officials, policy leaders, etc.)*

- The public health system will educate private and public health care providers regarding risk, testing, treatment and risk reduction strategies related to sexually transmitted infections, including HIV infection.
- The Division of Public Health will provide reimbursement for appropriate testing and treatment services.
- The Division of Public Health will increase public health staffing for partner counseling and referral, surveillance, and laboratory services, related to sexually transmitted infections, including HIV infection.
- The Division of Public Health will build coalitions between public and private providers to coordinate services.
- The Division of Public Health will establish coordination and collaboration between existing services that serve only persons with HIV infection or only persons with sexually transmitted infections.
- The Division of Public Health will develop improved surveillance/data collection systems.

## Evaluation and Measurement

To evaluate progress toward reducing the incidence of HIV infection in Wisconsin, the following four measurable objectives are proposed.

- By the year 2010 syphilis will be eliminated in Wisconsin.  
Method: Syphilis case reports  
Baseline: 43 cases of primary and secondary syphilis reported per 100,000 population  
Target: 0.2 cases of primary and secondary syphilis reported per 100,000 population
- By the year 2010 genital *Chlamydia trachomatis* infection rates will be reduced by 50%.  
Method: Chlamydia case reports  
Baseline: 308.6 cases of *Chlamydia trachomatis* per 100,000 population  
Target: 50% of baseline
- By the year 2010 *Neisseria gonorrhoeae* infection rates will be reduced by 50%.  
Method: Gonorrhea case reports  
Baseline: 114 cases of *Neisseria gonorrhoeae* reported per 100,000 population  
Target: 50% of baseline
- By the year 2010 the annual reported incidence of HIV infection will be reduced by 50%.  
Method: HIV case surveillance  
Baseline: An annual average of 8 cases per 100,000 population was reported during 1998-2000.  
Target: Less than 4 cases per 100,000 population

## Crosswalk to Other Health and System Priorities in Healthiest Wisconsin 2010

This objective is linked to the following other health and system priorities:

*Existing, Emerging, and Re-Emerging Communicable Diseases:* Efforts to address sexually transmitted infections, including HIV Infection, are closely tied to the efforts of the public health system to address existing, emerging, and re-emerging communicable diseases. Because STI and HIV services are often housed or coordinated closely with communicable disease programs, both systems must work together to ensure adequate resources, infrastructure, and staff capacity to address mutual program objectives.

*Access to Primary and Prevention Health Care Services:* Access includes addressing the cultural, linguistic, and socio-economic barriers to accessing prevention, care and treatment services related to sexually transmitted infections, including HIV infection.

*Social and Economic Factors that Influence Health:* As noted in the rationale, sexually transmitted infections, including HIV infection, disproportionately impact ethnic and racial minorities.

*Intentional and Unintentional Injuries and Violence:* This involves looking at the link between sexually transmitted infections, HIV infection, and sexual assault and violence.



## **Significant Linkages to Wisconsin's 12 Essential Public Health Services**

*Educate the public about current and emerging health issues:* By conducting public health education and training to both clients and providers, based in sound behavioral science practice and research, that assists persons at risk for sexually transmitted infections, including HIV infection, in changing their behavior.

*Monitor health status to identify community health problems:* Through ongoing public health needs assessment, surveillance and laboratory testing activities.

*Identify, investigate, control, and prevent health problems and environmental health hazards in the community:* By developing, implementing, and evaluating effective surveillance, testing, and intervention activities related to the prevention, identification, and treatment of sexually transmitted infections and HIV infection.

*Promote community partnerships to identify and solve health problems:* By sustaining existing, effective collaborations and creating new partnerships whenever possible, particularly between individual providers of services to persons with HIV infection and providers of persons with sexually transmitted infections.

## **Connection to the Three Overarching Goals of Healthiest Wisconsin 2010**

*Protect and promote health for all:* By trying to reach and serve all persons at high risk for sexually transmitted infections and HIV infection. This includes improving access to sexual health services for all persons in all communities, and providing adequate training in sexual health to service providers to assist them in improving the quality and accessibility of services to their clients.

*Eliminate health disparities:* By addressing the disproportionate impact of sexually transmitted infections and HIV infection on communities of color, youth, and women, and targeting interventions to community members with less access to health education and services.

*Transform Wisconsin's public health system:* By improving coordination and collaboration between providers of services for persons with sexually transmitted infections and HIV infection, and enhancing the overall service infrastructure. In addition, prioritize the use of limited resources by funding and supporting behaviorally sound, well evaluated, and effective interventions.

## **Key Interventions and/or Strategies Planned:**

Addressing the complex needs and issues associated with high risk sexual behavior will require a multi-pronged approach, including: Raising awareness among the general public about risk factors associated with sexually transmitted infections and HIV infection and the impact of these infections on the communities' health; providing comprehensive training and education for health care and other providers regarding effective services; and enhancing the overall infrastructure of surveillance, prevention, care and treatment services.

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